ANSWER 1 OF 7 USPATFULL on STN

ACCESSION NUMBER: 2003:38104 USPATFULL TITLE: VEGF fusion proteins

INVENTOR (S): Kovesdi, Imre, Rockville, MD, UNITED STATES Kessler, Paul D., Frederick, MD, UNITED STATES

PATENT ASSIGNEE(S): GenVec, Inc., Gaithersburg, MD, UNITED STATES, 20878

(U.S. corporation)

NUMBER KIND DATE PATENT INFORMATION: US 2003027751 A1 20030206
APPLICATION INFO.: US 2001-832355 A1 20010410 (9)
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: LEYDIG VOIT & MAYER, LTD, TWO PRUDENTIAL PLAZA, SUITE

4900, 180 NORTH STETSON AVENUE, CHICAGO, IL, 60601-6780

NUMBER OF CLAIMS: 46
EXEMPLARY CLAIM: 1
7034

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The invention provides therapeutic fusion proteins which include a first AB peptide portion comprising a first non-heparin binding VEGF peptide portion and a second non-VEGF peptide portion covalently associated with the first peptide portion, which first and second peptide portions separately promote angiogenesis, bone growth, wound healing, or any combination thereof. Further provided are polynucleotides encoding such fusion proteins, vectors including such polynucleotides, methods of making such proteins, and methods of promoting angiogenesis, bone growth, and/or wound healing using such proteins, polynucleotides, and vectors.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 2 OF 7 USPATFULL on STN

ACCESSION NUMBER: 2003:24164 USPATFULL

TITLE: Compositions and methods for inducing gene expression

INVENTOR (S): Gregory, Richard J., Westford, MA, UNITED STATES Vincent, Karen, Arlington, MA, UNITED STATES

PATENT ASSIGNEE(S):

Genzyme Corporation, Cambridge, MA, UNITED STATES,

02139 (U.S. corporation)

NUMBER KIND DATE -----US 2003018007 A1 20030123 US 2002-190394 A1 20020703 (10) PATENT INFORMATION: APPLICATION INFO.: APPLICATION INFO.:

RELATED APPLN. INFO.: Continuation of Ser. No. US 2000-579897, filed on 26

May 2000, GRANTED, Pat. No. US 6432927

Continuation-in-part of Ser. No. US 1998-133612, filed on 13 Aug 1998, ABANDONED Continuation of Ser. No. WO

1998-US25753, filed on 4 Dec 1998, PENDING

NUMBER DATE -----

PRIORITY INFORMATION: US 1997-67546P 19971204 (60)

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: GENZYME CORPORATION, LEGAL DEPARTMENT, 15 PLEASANT ST

CONNECTOR, FRAMINGHAM, MA, 01701-9322

18 NUMBER OF CLAIMS: EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 8 Drawing Page(s)

LINE COUNT:

2021

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention provides recombinant nucleic acid molecules encoding a chimeric transactivator protein including a DNA binding domain of a DNA binding protein and a protein domain capable of transcriptional activation. The present invention also provides recombinant viral and non-viral vectors that are able to infect and/or transfect and sustain expression of a biologically active chimeric transactivator proteins in mammalian cells. Also provided are host cell lines and non-human transgenic animals capable of expressing biologically active chimeric transactivator proteins. In another aspect, compositions and methods for treating or preventing ischemic damage associated with hypoxia-related disorders are provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 3 OF 7 USPATFULL on STN

ACCESSION NUMBER:

2002:273361 USPATFULL

TITLE:

Use of lymphangiogenic agents to treat lymphatic

disorders

INVENTOR(S):

Gravereaux, Edwin C., Brookline, MA, UNITED STATES

Silver, Marcy, Bolton, MA, UNITED STATES Yoon, Young-Sup, Watertown, MA, UNITED STATES Isner, Jeffrey M., Weston, MA, UNITED STATES Isner, Linda, Weston, MA, UNITED STATES LR

PATENT ASSIGNEE(S):

St. Elizabeth's Medical Center of Boston, Inc. (U.S.

corporation)

NUMBER KIND DATE PATENT INFORMATION: US 2002151489 A1 20021017 APPLICATION INFO.: US 2001-970088 A1 20011002 (9)

NUMBER DATE

______ PRIORITY INFORMATION: US 2000-237171P 20001002 (60)

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: David G. Conlin, Dike, Bronstein, Roberts & Cushman,

Intellectual Property Practice Group, P. O. Box 9169,

Boston, MA, 02209

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

41

NUMBER OF DRAWINGS:

35 Drawing Page(s) 1803

LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention provides methods for promoting the growth of new lymph vessels (lymphangiogenesis). Generally, such methods include administering at least one vascular endothelian factor (VEGF) such as VEGF-2. In one embodiment, therapeutic methods for treating lymphedema and related disorders in a human patient are disclosed. The VEGF can be provided by any suitable means including direct injection of a nucleic acid encoding same or an active fragment thereof. Also provided are pharmaceutical products for promoting lymphangiogenesis as well as a test system for screening compounds capable of inducing new lymph vessel

growth.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 4 OF 7 USPATFULL on STN

ACCESSION NUMBER: 2002:202067 USPATFULL

TITLE: Compositions and methods for inducing gene expression

INVENTOR (S): Gregory, Richard J., Westford, MA, United States

Vincent, Karen, Arlington, MA, United States

PATENT ASSIGNEE(S): Genzyme Corporation, Cambridge, MA, United States (U.S.

corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 6432927 B1 20020813 APPLICATION INFO.: US 2000-579897 20000526 (9) RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 133612

NUMBER DATE -----

PRIORITY INFORMATION: US 1997-67546P 19971204 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Nguyen, Dave T.
LEGAL REPRESENTATIVE: Kanter, Madge R.
NUMBER OF CLAIMS: 31
EXEMPLARY CLAIM: 1

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 8 Drawing Figure(s); 8 Drawing Page(s)

LINE COUNT: 2175

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention provides recombinant nucleic acid molecules encoding a chimeric transactivator protein including a DNA binding domain of a DNA binding protein and a protein domain capable of transcriptional activation. The present invention also provides recombinant viral and non-viral vectors that are able to infect and/or transfect and sustain expression of a biologically active chimeric transactivator proteins in mammalian cells. Also provided are host cell lines and non-human transgenic animals capable of expressing biologically active chimeric transactivator proteins. In another aspect, compositions and methods for treating or preventing ischemic damage associated with hypoxia-related disorders are provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 5 OF 7 PCTFULL COPYRIGHT 2007

ACCESSION NUMBER: 2002029087 PCTFULL ED 20020627 EW 200215

USE OF LYMPHANGIOGENIC AGENTS TO TREAT LYMPHATIC

UTILISATION D'AGENTS LYMPHANGIOGENIQUES POUR LE

TRAITEMENT DE TROUBLES LYMPHATIQUES

INVENTOR(S): GRAVEREAUX, Edwin, C., 1212 Fifth Avenue, #13E, New

York, NY 10029, US;

MARCY, Silver, 438 Still River Road, Bolton, MA 01740,

ISNER, Jeffrey, M., 34 Brenton Road, Weston, MA 02193,

YOON, Young-sup, 275 Main Street, Apt. #605, Watertown,

MA 02472, US

PATENT ASSIGNEE(S): ST. ELIZABETH'S MEDICAL CENTER OF BOSTON, INC., 736

Cambridge Street, Boston, MA 02135, US [US, US]

AGENT: BUCHANAN, Robert, L.\$, Dike, Bronstein, Roberts &

Cushman - IP Practice Group of Edwards & Angell, LLP,

P.O. Box 9169, Boston, MA 02209\$, US

LANGUAGE OF FILING: English LANGUAGE OF PUBL.: DOCUMENT TYPE:

English Patent

PATENT INFORMATION:

NUMBER KIND DATE _______ WO 2002029087 A2 20020411

DESIGNATED STATES

W:

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ

TM TR TT TZ UA UG UZ VN YU ZA ZW

RW (ARIPO): GH GM KE LS MW MZ SD SL SZ TZ UG ZW
RW (EAPO): AM AZ BY KG KZ MD RU TJ TM
RW (EPO): AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

TR

RW (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG APPLICATION INFO.: WO 2001-US30904 A 20011002 PRIORITY INFO.: US 2000-60/237,171 20001002

The present invention provides methods for promoting the growth of new lymph vessels (lymphangiogenesis). Generally, such methods include administering at least one vascular endothelian factor (VEGF) such as VEGF-2. In one embodiment, therapeutic methods for treating lymphedema and related disorders in a human patient are disclosed. The VEGF can be provided by any suitable means including direct injection of a nucleic acid encoding same or an active fragment thereof. Also provided are pharmaceutical products for promoting lymphangiogenesis as well as a test system for screening compounds capable of inducing new lymph vessel

L'invention concerne des methodes permettant de favoriser la croissance ABFR de nouveaux vaisseaux lymphatiques (lymphangiogenese). D'une maniere generale, de telles methodes consistent a administrer au moins un facteur endothelial vasculaire (VEGF) tel que VEGF-2. Dans un mode de realisation, l'invention concerne des methodes therapeutiques permettant de traiter un lymphoedeme et des troubles associes chez un patient humain. Le VEGF peut etre administre par un moyen approprie quelconque, notamment une injection directe d'un acide nucleique codant celui-ci ou un fragment actif de celui-ci. L'invention concerne en outre des produits pharmaceutiques favorisant la lymphangiogenese, ainsi qu'un systeme d'essai permettant de balayer des composes capables d'induire une croissance de nouveaux vaisseaux lymphatiques.

L9 ANSWER 6 OF 7

ACCESSION NUMBER: 1999028469 PCTFULL ED 20020515

TITLE (ENGLISH): COMPOSITIONS AND METHODS FOR INDUCING GENE EXPRESSION TITLE (FRENCH): COMPOSITIONS ET PROCEDES INDUISANT L'EXPRESSION GENIQUE

INVENTOR(S): GREGORY, Richard, J.; VINCENT, Karen

PATENT ASSIGNEE(S):

GENZYME CORPORATION; GREGORY, Richard, J.;

VINCENT, Karen

LANGUAGE OF PUBL.:

English

DOCUMENT TYPE:

Patent

PATENT INFORMATION:

NUMBER KIND DATE ------

WO 9928469 A1 19990610

DESIGNATED STATES

W :

AU CA IL JP MX NO NZ SG US US AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

APPLICATION INFO.: WO 1998-US25753 A 19981204 PRIORITY INFO.: US 1997-60/067,546 19971204 US 1998-09/133,612 19980813

ABEN The present invention provides recombinant nucleic acid molecules encoding a chimeric

transactivator protein including a DNA binding domain of a DNA binding protein and a protein domain

capable of transcriptional activation. The present invention also provides recombinant viral and

non-viral vectors that are able to infect and/or transfect and sustain expression of a biologically

active chimeric transactivor proteins in mammalian cells. Also provided are host cell lines and

non-human transgenic animals capable of expressing biologically active chimeric transactivator

proteins. In another aspect, compositions and methods for treating or preventing ischemic damage

associated with hypoxia-related disorders are provided.

ABFR L'invention concerne des molecules d'acide nucleique de recombinaison qui codent une proteine

de transactivation chimere comportant un domaine de liaison d'ADN d'une proteine de liaison d'ADN et

un domaine de proteine capable d'induire une activation

transcriptionnelle. L'invention concerne

egalement des vecteurs viraux et non viraux de recombinaison capables d'infecter et/ou de

 ${\tt transfecter}\ {\tt et}\ {\tt d'assurer}\ {\tt l'expression}\ {\tt d'une}\ {\tt proteine}\ {\tt de}\ {\tt transactivation}$ ${\tt chimere}\ {\tt biologiquement}$

active dans des cellules mammaliennes. L'invention concerne en outre des lignees cellulaires hotes

et des animaux transgeniques non humains capables d'exprimer ladite proteine. L'invention concerne

aussi des compositions et des procedes permettant de traiter ou de prevenir les lesions d'origine

ischemique associees aux troubles lies a l'hypoxie.

L9 ANSWER 7 OF 7 MEDLINE on STN DUPLICATE 1

ACCESSION NUMBER: 1999148331 MEDLINE DOCUMENT NUMBER: PubMed ID: 10025464

TITLE: Vascular endothelial growth factor is more important than

basic fibroblastic growth factor during ischemic wound

healing.

AUTHOR: Corral C J; Siddiqui A; Wu L; Farrell C L; Lyons D; Mustoe

ΤA

CORPORATE SOURCE: Division of Plastic Surgery and Reconstructive Surgery,

Northwestern University Medical School, Chicago, Ill, USA.

CONTRACT NUMBER: GM-41303 (NIGMS)

SOURCE: Archives of surgery (Chicago, Ill.: 1960), (1999 Feb) 134

(2) 200-5.

Journal code: 9716528. ISSN: 0004-0010.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals

ENTRY MONTH: 199903

ENTRY DATE: Entered STN: 19990326

Last Updated on STN: 19990326

Entered Medline: 19990318

AB OBJECTIVES: To test the influence of vascular endothelial growth factor (**VEGF**) on normal and ischemic wounds in a noncontractive dermal

ulcer standardized model in the rabbit ear and to assay the levels of both **VEGF** and basic fibroblastic growth factor messenger RNA levels in normal and ischemic wounds at different intervals during the healing process. DESIGN AND INTERVENTIONS: Dermal ulcers were created in the normal and ischemic ears of 20 anesthetized young female New Zealand white rabbits. Either VEGF 121, VEGF 165 (30 microg per wound), or buffered saline solution alone was applied to each wound and covered. Wounds were harvested at day 7 or 10 and evaluated histologically. Twenty-four similar rabbits were wounded in the same manner and their untreated wounds were harvested at 1, 3, 7, and 10 days after wounding. The wounds were analyzed with reverse transcriptase polymerase chain reaction. MAIN OUTCOME MEASURES: Histologic specimens were measured for amount of new epithelium and granulation tissue. Reverse transcriptase polymerase chain reaction was used to determine basic fibroblastic growth factor and VEGF messenger RNA expression. RESULTS: Both isoforms of VEGF improved granulation tissue formation in both normal and ischemic wounds with a magnitude similar to other vulnerary agents tested in the past. Vascular endothelial growth factor application had no effect on new epithelium formation. In contrast to basic fibroblastic growth factor, VEGF messenger RNA levels were induced 4 fold by ischemia alone and 6 fold by wounding in both ischemic and normal wounds. CONCLUSION: Vascular endothelial growth factor seems to be more important than basic fibroblastic growth factor during ischemic wound healing. Treatment of ischemic wounds with VEGF improves the deficit in wound healing produced by ischemia.

L18 ANSWER 1 OF 41 USPATFULL on STN

ACCESSION NUMBER: 2004:83200 USPATFULL

TITLE: Screening and therapy for lymphatic disorders involving

the FLT4 receptor tyrosine kinase (VEGFR-3)

INVENTOR(S): Ferrell, Robert E., Pittsburgh, PA, UNITED STATES

Alitalo, Kari, Helsinki, FINLAND

Finegold, David N., Pittsburgh, PA, UNITED STATES

Karkkainen, Marika, Helsiknki, FINLAND

NUMBER KIND DATE -----

PATENT INFORMATION: US 2004063656 A1 20040401 APPLICATION INFO.: US 2003-661740 A1 20030912

APPLICATION INFO.:

RELATED APPLN. INFO.: Division of Ser. No. US 1999-375248, filed on 16 Aug

1999, PENDING Continuation-in-part of Ser. No. WO

1999-US6133, filed on 26 Mar 1999, PENDING

DOCUMENT TYPE: Utility APPLICATION FILE SEGMENT:

LEGAL REPRESENTATIVE: MARSHALL, GERSTEIN & BORUN LLP, 6300 SEARS TOWER, 233

S. WACKER DRIVE, CHICAGO, IL, 60606

NUMBER OF CLAIMS: 36

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 7 Drawing Page(s)

LINE COUNT: 2972

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides materials and methods for screening for

and treating hereditary lymphedema in human subjects.

L23 ANSWER 1 OF 15 USPATFULL on STN

ACCESSION NUMBER: 2003:306487 USPATFULL

TITLE: Vascular endothelial growth factor-2

INVENTOR(S): Coleman, Timothy, Gaithersburg, MD, UNITED STATES

NUMBER KIND DATE PATENT INFORMATION: US 2003215921 A1 20031120 APPLICATION INFO.: US 2001-921143 A1 20010803 (9)

NUMBER DATE

PRIORITY INFORMATION: US 2000-223276P 20000804 (60)

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE,

ROCKVILLE, MD, 20850

NUMBER OF CLAIMS: 18

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 55 Drawing Page(s)

LINE COUNT: 6836

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Disclosed are human VEGF-2 polypeptides, biologically active, diagnostically or therapeutically useful fragments, analogs, or derivatives thereof, and DNA(RNA) encoding such VEGF-2 polypeptides. Also provided are procedures for producing such polypeptides by recombinant techniques and antibodies and antagonists against such polypeptides. Such polypeptides and polynucleotides may be used therapeutically for stimulating wound healing and for vascular tissue repair. Also provided are methods of using the antibodies and antagonists to inhibit tumor angiogenesis and thus tumor growth, inflammation, diabetic retinopathy, rheumatoid arthritis, and psoriasis.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L23 ANSWER 2 OF 15 USPATFULL on STN

ACCESSION NUMBER: 2003:251885 USPATFULL

TITLE: Vascular endothelial growth factor 2

INVENTOR(S): Rosen, Craig A., Laytonsville, MD, UNITED STATES Albert, Vivian R., Rockville, MD, UNITED STATES

Ruben, Steven M., Olney, MD, UNITED STATES Wager, Ruth, Rockville, MD, UNITED STATES

NUMBER KIND -----PATENT INFORMATION: US 2003176674 A1 20030918 US 2002-120377 A1 20020412 (10) APPLICATION INFO.:

NUMBER DATE

US 2001-317600P 20010907 (60) US 2001-283391P 20010413 (60) PRIORITY INFORMATION:

DOCUMENT TYPE: Utility Utility APPLICATION FILE SEGMENT:

LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE.

NUMBER OF CLAIMS: 133
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS

NUMBER OF DRAWINGS: 54 Drawing Page(s)

LINE COUNT: 12110

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Disclosed are human VEGF-2 antibodies, antibody fragments, or variants thereof. Also provided are processes for producing such antibodies. The present invention relates to methods and compositions for preventing, treating or ameliorating a disease or disorder comprising administering to an animal, preferably a human, an effective amount of one or more VEGF-2 antibodies or fragments or variants thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L23 ANSWER 3 OF 15 USPATFULL on STN

ACCESSION NUMBER:

2003:250489 USPATFULL

TITLE:

Vascular endothelial growth factor 2

INVENTOR(S):

Rosen, Craig A., Laytonsville, MD, UNITED STATES Albert, Vivian R., Rockville, MD, UNITED STATES Ruben, Steven M., Olney, MD, UNITED STATES

Wager, Ruth E., Rockville, MD, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION: APPLICATION INFO.:	US 2003175274 US 2002-120414		20030918 20020412	(10)

NUMBER DATE -----

PRIORITY INFORMATION: US 2001-283385P 20010413 (60) US 2002-350366P 20020124 (60)

Utility APPLICATION DOCUMENT TYPE:

FILE SEGMENT:

ROCKVILLE, MD, 20850 133 LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE,

NUMBER OF CLAIMS:

EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 53 Drawing Page(s)

LINE COUNT: 12105

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Disclosed are human **VEGF-2** antibodies, antibody fragments, or AB variants thereof. Also provided are processes for producing such antibodies. The present invention relates to methods and compositions for preventing, treating or ameliorating a disease or disorder comprising administering to an animal, preferably a human, an effective amount of one or more VEGF-2 antibodies or fragments or variants thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L23 ANSWER 4 OF 15 USPATFULL on STN

ACCESSION NUMBER:

2003:244377 USPATFULL

TITLE: INVENTOR(S): Vascular endothelial growth factor 2

Rosen, Craig A., Laytonsville, MD, UNITED STATES Albert, Vivian R., Rockville, MD, UNITED STATES Ruben, Steven M., Olney, MD, UNITED STATES

Wager, Ruth E., Rockville, MD, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION: APPLICATION INFO.:	US 2003170786 US 2002-120398	A1 A1	20030911	(10)

NUMBER DATE

PRIORITY INFORMATION: US 2001-283408P 20010413 (60)

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE. ROCKVILLE, MD, 20850

NUMBER OF CLAIMS: EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 48 Drawing Page(s)

LINE COUNT: 11075

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Disclosed are human **VEGF**-2 antibodies, antibody fragments, or variants thereof. Also provided are processes for producing such antibodies. The present invention relates to methods and compositions for preventing, treating or ameliorating a disease or disorder comprising administering to an animal, preferably a human, an effective amount of one or more VEGF-2 antibodies or fragments or variants thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L23 ANSWER 5 OF 15 USPATFULL on STN

ACCESSION NUMBER: 2003:38360 USPATFULL

TITLE: Vascular endothelial growth factor 2

INVENTOR(S): Hu, Jing-Shan, Mountain View, CA, UNITED STATES

Cao, Liang, Bethesda, MD, UNITED STATES

Rosen, Craig A., Laytonsville, MD, UNITED STATES

NUMBER KIND DATE -----US 2003028007 A1 20030206 US 2002-84488 A1 20020228 (10)

PATENT INFORMATION: APPLICATION INFO.: RELATED APPLN. INFO.:

Continuation of Ser. No. US 2000-623725, filed on 20 Nov 2000, PENDING A 371 of International Ser. No. WO

1999-US5021, filed on 10 Mar 1999, UNKNOWN Continuation-in-part of Ser. No. US 1998-42105, filed

on 13 Mar 1998, GRANTED, Pat. No. US 6040157

Continuation-in-part of Ser. No. US 1998-107997, filed

on 30 Jun 1998, PENDING

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE,

ROCKVILLE, MD, 20850

NUMBER OF CLAIMS: 26 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 47 Drawing Page(s)

LINE COUNT: 6839

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Disclosed are human VEGF-2 polypeptides, biologically active, diagnostically or therapeutically useful fragments, analogs, or derivatives thereof, and DNA(RNA) encoding such VEGF-2 polypeptides. Also provided are procedures for producing such polypeptides by recombinant techniques and antibodies and antagonists against such polypeptides. Such polypeptides and polynucleotides may be used therapeutically for stimulating wound healing and for vascular tissue repair. Also provided are methods of using the antibodies and antagonists to inhibit tumor angiogenesis and thus tumor growth, inflammation, diabetic retinopathy, rheumatoid arthritis, and psoriasis.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L23 ANSWER 6 OF 15 USPATFULL on STN

ACCESSION NUMBER: 2003:10662 USPATFULL

TITLE: INVENTOR (S): Vascular endothelial growth factor 2 Hu, Jing-Shan, Sunnyvale, CA, UNITED STATES

Rosen, Craig A., Laytonsville, MD, UNITED STATES

Cao, Liang, South Horizons, HONG KONG

NUMBER KIND DATE -----

PATENT INFORMATION: APPLICATION INFO.:

US 2003008357 A1 20030109 US 2001-935726 A1 20010824 (9)

RELATED APPLN. INFO.:

Continuation of Ser. No. US 1999-438538, filed on 12 Nov 1999, ABANDONED Division of Ser. No. US 1998-42105, filed on 13 Mar 1998, PATENTED Continuation-in-part of Ser. No. US 1997-999811, filed on 24 Dec 1997, PATENTED Continuation-in-part of Ser. No. US 1995-465968, filed on 6 Jun 1995, PENDING Continuation-in-part of Ser. No. US 1997-824996, filed on 27 Mar 1997, PATENTED Division

of Ser. No. US 1994-207550, filed on 8 Mar 1994,

ABANDONED

DOCUMENT TYPE:

Utility

FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

NUMBER OF CLAIMS:

76 1

NUMBER OF DRAWINGS: 47 Drawing Page(s)

LINE COUNT:

5225

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AΒ

Disclosed are human VEGF2 polypeptides, biologically active, diagnostically or therapeutically useful fragments, analogs, or derivatives thereof, and DNA (RNA) encoding such VEGF2 polypeptides. Also provided are procedures for producing such polypeptides by recombinant techniques and antibodies and antagonists against such polypeptides. Such polypeptides may be used therapeutically for stimulating wound healing and for vascular tissue repair. Also provided are methods of using the antibodies and antagonists to inhibit tumor angiogenesis and thus tumor growth, inflammation, diabetic retinopathy, rheumatoid arthritis, and psoriasis.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L23 ANSWER 7 OF 15 USPATFULL on STN

ACCESSION NUMBER:

2002:273361 USPATFULL

TITLE:

Use of lymphangiogenic agents to treat lymphatic

disorders

INVENTOR(S):

Gravereaux, Edwin C., Brookline, MA, UNITED STATES

Silver, Marcy, Bolton, MA, UNITED STATES

Yoon, Young-Sup, Watertown, MA, UNITED STATES Isner, Jeffrey M., Weston, MA, UNITED STATES Isner, Linda, Weston, MA, UNITED STATES LR

PATENT ASSIGNEE(S):

St. Elizabeth's Medical Center of Boston, Inc. (U.S.

corporation)

NUMBER KIND DATE PATENT INFORMATION: APPLICATION INFO.: US 2002151489 A1 20021017 US 2001-970088 A1 20011002 (9)

NUMBER DATE ------

PRIORITY INFORMATION:

US 2000-237171P 20001002 (60)

DOCUMENT TYPE: FILE SEGMENT:

Utility APPLICATION

LEGAL REPRESENTATIVE: David G. Conlin, Dike, Bronstein, Roberts & Cushman, Intellectual Property Practice Group, P. O. Box 9169,

Boston, MA, 02209

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

41

NUMBER OF DRAWINGS:

WINGS: 35 Drawing Page(s)

LINE COUNT:

1803

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention provides methods for promoting the growth of new lymph vessels (lymphangiogenesis). Generally, such methods include administering at least one vascular endothelian factor (**VEGF**) such as **VEGF-2**. In one embodiment, therapeutic methods for treating lymphedema and related disorders in a human patient are disclosed. The VEGF can be provided by any suitable means including direct injection of a nucleic acid encoding same or an active fragment thereof. Also provided are pharmaceutical products for promoting lymphangiogenesis as well as a test system for screening compounds capable of inducing new lymph vessel growth.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L23 ANSWER 8 OF 15 USPATFULL on STN

ACCESSION NUMBER: 2000:34403 USPATFULL

TITLE:

Vascular endothelial growth factor 2

INVENTOR (S): Hu, Jing-Shan, Sunnyvale, CA, United States

Rosen, Craig A., Laytonsville, MD, United States

Cao, Liang, South Horizons, Hong Kong

PATENT ASSIGNEE(S):

Human Genome Sciences, Inc., Rockville, MD, United

States (U.S. corporation)

NUMBER KIND DATE US 6040157 20000321 US 1998-42105 19980313 19980313 (9)

APPLICATION INFO.: RELATED APPLN. INFO.:

PATENT INFORMATION:
APPLICATION INFO

Continuation-in-part of Ser. No. US 1997-999811, filed on 24 Dec 1997, now patented, Pat. No. US 5932540 which is a continuation-in-part of Ser. No. US 1997-824996, filed on 27 Mar 1997 And a continuation-in-part of Ser. No. US 1995-465968, filed on 6 Jun 1995 which is a continuation-in-part of Ser. No. US 1994-207550, filed

on 8 Mar 1994

DOCUMENT TYPE: Utility FILE SEGMENT: Granted PRIMARY EXAMINER: Ulm, John

ASSISTANT EXAMINER:

Saoud, Christine LEGAL REPRESENTATIVE: Human Genome Sciences Inc.

NUMBER OF CLAIMS: 75 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS:

LINE COUNT:

48 Drawing Figure(s); 47 Drawing Page(s) 5292

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Disclosed are human VEGF2 polypeptides, biologically active, diagnostically or therapeuticall sefl fragments, analogs, or derivatives thereof, and DNA (RNA) enco such VEGF2 polypeptides. Also provided are

procedures for producing such polypeptides by recombinant techniques and antibodies and antagonists against such polypeptides. Such polypeptides may be used therapeutically for stimulating wound healing and for vascular tissue repair. Also provided are methods of using the antibodies and antagonists to inhibit tumor angiogenesis and thus tumor growth, inflammation, diabetic retinopathy, rheumatoid arthritis, and psoriasis.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 9 OF 15 COPYRIGHT 2004 Univentio on STN PCTFULL ACCESSION NUMBER: 2003097660 PCTFULL ED 20031202 EW 200348 TITLE (ENGLISH): VASCULAR ENDOTHELIAL GROWTH FACTOR 2 TITLE (FRENCH): FACTEUR DE CROISSANCE ENDOTHELIAL VASCULAIRE 2 INVENTOR (S): ROSEN, Graig, A., 22400 Rolling Hill ROad, Laytonsville, MD 20882, US [US, US]; ALBERT, Vivian, R., 13710 Mills Farm Road, Rockville, MD 20850, US [US, US]; RUBEN, Steven, M., 19420 Pyrite Lane, Brookeville, MD 20833, US [US, US]; WAGER, Ruth, E., 7309 Gold Ring Terrace, Rockville, MD 20855, US [US, US] PATENT ASSIGNEE(S): HUMAN GENOME SCIENCES, INC., 9410 Key West Avenue, Rockville, MA 20850, US [US, US], for all designates States except US; ROSEN, Graig, A., 22400 Rolling Hill ROad, Laytonsville, MD 20882, US [US, US], for US only; ALBERT, Vivian, R., 13710 Mills Farm Road, Rockville, MD 20850, US [US, US], for US only; RUBEN, Steven, M., 19420 Pyrite Lane, Brookeville, MD 20833, US [US, US], for US only; WAGER, Ruth, E., 7309 Gold Ring Terrace, Rockville, MD 20855, US [US, US], for US only AGENT: WALES, Michele, M.\$, Human Genome Sciences, Inc., 9410 Key West Avenue, Rockville, MD 20850\$, US LANGUAGE OF FILING: English LANGUAGE OF PUBL.: English DOCUMENT TYPE: Patent PATENT INFORMATION: NUMBER KIND DATE ------WO 2003097660 A1 20031127 DESIGNATED STATES W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW RW (ARIPO): GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW RW (EAPO): AM AZ BY KG KZ MD RU TJ TM RW (EPO): AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LU MC NL PT SE SK TR RW (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG APPLICATION INFO.: WO 2002-US26246 A 20020819 PRIORITY INFO.: US 2002-PCT/US02/11474 20020412 Disclosed are human VEGF-2 antibodies, antibody fragments, or ABEN variants thereof. Also provided are processes for producing such antibodies. The present invention relates to methods and compositions for preventing, treating or ameliorating a disease or disorder comprising administering to an animal, preferably a human, an

effective amount of one or more **VEGF-2** antibodies or fragments or variants thereof. ABFR L'invention concerne des anticorps VEGF-2, des fragments d'anticorps ou des variants correspondants. Elle se rapporte egalement a des procedes de production de ces anticorps. La presente invention concerne en outre des methodes et des compositions destinees a prevenir, traiter ou attenuer une maladie ou un trouble, et consistant a administrer a un animal, de preference un etre humain, une dose efficace d'un ou plusieurs anticorps VEGF-2 ou des fragments ou variants correspondants. L23 ANSWER 10 OF 15 PCTFULL COPYRIGHT 2004 Univentio on STN ACCESSION NUMBER: 2002083850 PCTFULL ED 20021107 EW 200243
TITLE (ENGLISH): VASCULAR ENDOTHELIAL GROWTH FACTOR 2
TITLE (FRENCH): FACTEUR 2 DE CROISSANCE ENDOTHELIALE VASCULAIRE INVENTOR(S): ROSEN, Craig, A., 22400 Rolling Hill Lane, Laytonsville, MD 20882, US [US, US]; ALBERT, Vivian, R., 13710 Mills Farm Road, Rockville, MD 20850, US [US, US]; RUBEN, Steven, M., 18528 Heritage Hills Drive, Olney, MD 20832, US [US, US]; WAGER, Ruth, E., 7309 Gold Ring Terrace, Rockville, MD 20855, US [US, US] PATENT ASSIGNEE(S): HUMAN GENOME SCIENCES, INC., 9410 Key West Avenue, Rockville, MD 20850, US [US, US], for all designates States except US; ROSEN, Craig, A., 22400 Rolling Hill Lane, Laytonsville, MD 20882, US [US, US], for US only; ALBERT, Vivian, R., 13710 Mills Farm Road, Rockville, MD 20850, US [US, US], for US only; RUBEN, Steven, M., 18528 Heritage Hills Drive, Olney, MD 20832, US [US, US], for US only; WAGER, Ruth, E., 7309 Gold Ring Terrace, Rockville, MD 20855, US [US, US], for US only AGENT: WALES, Michele, M.\$, Human Genome Sciences, Inc., 9410 Key West Avenue, Rockville, MD 20850\$, US LANGUAGE OF FILING: English LANGUAGE OF PUBL.: English DOCUMENT TYPE: Patent PATENT INFORMATION: NUMBER KIND DATE -----WO 2002083850 A2 20021024 DESIGNATED STATES W : AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW RW (ARIPO): GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW RW (EAPO): AM AZ BY KG KZ MD RU TJ TM RW (EPO): AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR RW (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG BF BJ CF CG CI CM GA GN GQ GW ML WO 2002-US11405 A 20020412 US 2001-60/283 408 APPLICATION INFO.:

Disclosed are human VEGF-2 antibodies, antibody fragments, or variants thereof. Also provided are processes for producing such antibodies. The present invention relates to methods and compositions for preventing, treating or ameliorating a disease or disorder

US 2001-60/283,408 20010413

PRIORITY INFO.:

comprising administering to an animal, preferably a human, an effective amount of one or more VEGF-2 antibodies or fragments or variants thereof.

ABFR

La presente invention concerne des anticorps anti VEGF-2 humain, des fragments d'anticorps ou des variants de ceux-ci. La presente invention concerne egalement des procedes pour produire de tels anticorps. En outre, cette invention concerne des methodes et des compositions pour prevenir, traiter ou ameliorer une maladie ou un trouble, lesdites methodes consistant a administrer a un animal, de preference a un etre humain, une quantite efficace d'un ou de plusieurs anticorps anti VEGF-2 ou des fragments ou des variants de ceux-ci.

L23ANSWER 11 OF 15 PCTFULL COPYRIGHT 2004 Univentio on STN ACCESSION NUMBER: 2002083849 PCTFULL ED 20021107 EW 200243 TITLE (ENGLISH): VASCULAR ENDOTHELIAL GROWTH FACTOR 2

TITLE (FRENCH):

FACTEUR DE CROISSANCE ENDOTHELIAL VASCULAIRE 2 INVENTOR(S): ROSEN, Craig, A., 22400 Rolling Hill Lane, Laytonsville, MD 20882, US [US, US];

ALBERT, Vivian, R., 13710 Mills Farm Road, Rockville,

MD 20850, US [US, US];

RUBEN, Steven, M., 18528 Heritage Hills Drive, Olney,

MD 20832, US [US, US];

WAGER, Ruth, E., 7309 Gold Ring Terrace, Rockville, MD

20855, US [US, US]

PATENT ASSIGNEE(S): HUMAN GENOME SCIENCES, INC., 9410 Key West Avenue,

Rockville, MD 20850, US [US, US], for all designates

States except US;

ROSEN, Craig, A., 22400 Rolling Hill Lane,

Laytonsville, MD 20882, US [US, US], for US only; ALBERT, Vivian, R., 13710 Mills Farm Road, Rockville,

MD 20850, US [US, US], for US only;

RUBEN, Steven, M., 18528 Heritage Hills Drive, Olney,

MD 20832, US [US, US], for US only;

WAGER, Ruth, E., 7309 Gold Ring Terrace, Rockville, MD

20855, US [US, US], for US only

AGENT: WALES, Michele, M.\$, Human Genome Sciences, Inc., 9410

Key West Avenue, Rockville, MD 20850\$, US

LANGUAGE OF FILING: English LANGUAGE OF PUBL.: English DOCUMENT TYPE: Patent

PATENT INFORMATION:

NUMBER KIND DATE -----WO 2002083849 A2 20021024

DESIGNATED STATES

W : AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR

CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW

RW (ARIPO): GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

RW (EAPO): AM AZ BY KG KZ MD RU TJ TM

RW (EPO): AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

TR

RW (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

APPLICATION INFO.: WO 2002-US11404 A 20020412 PRIORITY INFO.: US 2001-60/283,391 20010413 US 2001-60/317,600 20010907

Disclosed are human VEGF-2 antibodies, antibody fragments, or ABEN variants thereof. Also provided are processes for producing such antibodies. The present invention relates to methods and compositions for preventing, treating or ameliorating a disease or disorder comprising administering to an animal, preferably a human, an effective amount of one or more VEGF-2 antibodies or fragments or variants thereof.

L'invention concerne des anticorps humains VEGF-2, des fragments ABFR d'anticorps ou des variants de ceux-ci. L'invention concerne egalement des procedes de preparation de tels anticorps, ainsi que des procedes et des compositions permettant de prevenir, de traiter ou de soulager une maladie ou un trouble, lesquels consistent a administrer a un animal, de preference a un etre humain, une quantite efficace d'un ou de plusieurs anticorps VEGF-2 ou de fragments ou de variants de ceux-ci.

L23 ANSWER 12 OF 15 PCTFULL COPYRIGHT 2004 Univentio on STN ACCESSION NUMBER: 2002083704 PCTFULL ED 20021107 EW 200243 TITLE (ENGLISH): VASCULAR ENDOTHELIAL GROWTH FACTOR 2 FACTEUR DE CROISSANCE 2, ENDOTHELIAL, VASCULAIRE TITLE (FRENCH): ROSEN, Craig, A., 22400 Rolling Hill Lane, Laytonsville, MD 20882, US [US, US]; INVENTOR(S): ALBERT, Vivian, R., 13710 Mills Farm Road, Rockville, MD 20850, US [US, US]; RUBEN, Steven, M., 18528 Heritage Hills Drive, Olney, MD 20832, US [US, US]; WAGER, Ruth, E., 7309 Gold Ring Terrace, Rockville, MD 20855, US [US, US] PATENT ASSIGNEE(S): HUMAN GENOME SCIENCES, INC., 9410 Key West Avenue, Rockville, MD 20850, US [US, US], for all designates

States except US;

ROSEN, Craig, A., 22400 Rolling Hill Lane, Laytonsville, MD 20882, US [US, US], for US only; ALBERT, Vivian, R., 13710 Mills Farm Road, Rockville,

MD 20850, US [US, US], for US only;

RUBEN, Steven, M., 18528 Heritage Hills Drive, Olney,

MD 20832, US [US, US], for US only;

WAGER, Ruth, E., 7309 Gold Ring Terrace, Rockville, MD

20855, US [US, US], for US only

AGENT: WALES, Michele, M.\$, Human Genome Sciences, Inc., 9410

Key West Avenue, Rockville, MD 20850\$, US

LANGUAGE OF FILING: English LANGUAGE OF PUBL.: English DOCUMENT TYPE: Patent PATENT INFORMATION:

NUMBER KIND DATE -----WO 2002083704 A1 20021024

DESIGNATED STATES

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR

CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI

SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW

RW (ARIPO): GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

RW (EAPO): AM AZ BY KG KZ MD RU TJ TM

AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE RW (EPO):

TR

RW (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

APPLICATION INFO.: WO 2002-US11474 A 20020412 PRIORITY INFO.: US 2002-60/350,366 20010413 20020124

Disclosed are human vegr-2 antibodies, antibody fragments, or ABEN

variants thereof. Also provided are processes for producing such antibodies. The present invention relates to methods and compositions for preventing, treating or ameliorating a disease or disorder comprising administering to an animal, preferably a human, an effective amount of one or more VEGF-2 antibodies or fragments or variants thereof.

ABFR

L'invention concerne des anticorps VEGF-2 humains, des fragments d'anticorps ou des variants correspondants, ainsi que des processus de production de ces anticorps. La presente invention a egalement trait a des methodes et a des compositions servant a prevenir, traiter ou ameliorer une maladie ou un trouble. Lesdites methodes consistent a administrer a un animal, de preference, a un etre humain, une quantite efficace d'au moins un anticorps VEGF-2 ou des fragments ou des variants correspondants.

ANSWER 13 OF 15 PCTFULL L23 COPYRIGHT 2004 Univentio on STN ACCESSION NUMBER: 2002029087 PCTFULL ED 20020627 EW 200215 TITLE (ENGLISH): USE OF LYMPHANGIOGENIC AGENTS TO TREAT LYMPHATIC DISORDERS

TITLE (FRENCH): UTILISATION D'AGENTS LYMPHANGIOGENIQUES POUR LE

TRAITEMENT DE TROUBLES LYMPHATIQUES

INVENTOR(S): GRAVEREAUX, Edwin, C., 1212 Fifth Avenue, #13E, New

York, NY 10029, US;

MARCY, Silver, 438 Still River Road, Bolton, MA 01740,

ISNER, Jeffrey, M., 34 Brenton Road, Weston, MA 02193,

US;

YOON, Young-sup, 275 Main Street, Apt. #605, Watertown,

MA 02472, US

PATENT ASSIGNEE(S): ST. ELIZABETH'S MEDICAL CENTER OF BOSTON, INC., 736

Cambridge Street, Boston, MA 02135, US [US, US]

AGENT: BUCHANAN, Robert, L.\$, Dike, Bronstein, Roberts & Cushman - IP Practice Group of Edwards & Angell, LLP,

P.O. Box 9169, Boston, MA 02209\$, US

LANGUAGE OF FILING: English LANGUAGE OF PUBL.: English DOCUMENT TYPE: Patent

PATENT INFORMATION:

NUMBER KIND DATE -----WO 2002029087 A2 20020411

DESIGNATED STATES

W:

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ

TM TR TT TZ UA UG UZ VN YU ZA ZW

GH GM KE LS MW MZ SD SL SZ TZ UG ZW RW (ARIPO):

RW (EAPO): AM AZ BY KG KZ MD RU TJ TM

AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE RW (EPO):

TR

BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

The present invention provides methods for promoting the growth of new lymph vessels (lymphangiogenesis). Generally, such methods include administering at least one vascular endothelian factor (**VEGF**) such as **VEGF**-2. In one embodiment, therapeutic methods for treating lymphedema and related disorders in a human patient are disclosed. The VEGF can be provided by any

suitable means including direct injection of a nucleic acid encoding same or an active fragment thereof. Also provided are pharmaceutical products for promoting lymphangiogenesis as well as a test system for screening compounds capable of inducing new lymph vessel growth. L'invention concerne des methodes permettant de favoriser la croissance ABFR de nouveaux vaisseaux lymphatiques (lymphangiogenese). D'une maniere generale, de telles methodes consistent a administrer au moins un facteur endothelial vasculaire (VEGF) tel que VEGF-2. Dans un mode de realisation, l'invention concerne des methodes therapeutiques permettant de traiter un lymphoedeme et des troubles associes chez un patient humain. Le VEGF peut etre administre par un moyen approprie quelconque, notamment une injection directe d'un acide nucleique codant celui-ci ou un fragment actif de celui-ci. L'invention concerne en outre des produits pharmaceutiques favorisant la lymphangiogenese, ainsi qu'un systeme d'essai permettant de balayer des composes capables d'induire une croissance de nouveaux vaisseaux lymphatiques.

ANSWER 14 OF 15 PCTFULL COPYRIGHT 2004 Univentio on STN ACCESSION NUMBER: 2002011769 PCTFULL ED 20020711 EW 200207 TITLE (ENGLISH): VASCULAR ENDOTHELIAL GROWTH FACTOR 2 TITLE (FRENCH):

FACTEUR 2 DE CROISSANCE ENDOTHELIALE (VEGF-2) INVENTOR(S): COLEMAN, Timothy, A., 7512 Boxberry Terrace, Gaithersburg, MD 20879, US [US, US]

PATENT ASSIGNEE(S): HUMAN GENOME SCIENCES, INC., 9410 Key West Avenue,

Rockville, MD 20850, US [US, US], for all designates

States except US;

COLEMAN, Timothy, A., 7512 Boxberry Terrace, Gaithersburg, MD 20879, US [US, US], for US only WALES, Michele, M.\$, 9410 Key West Avenue, Rockville,

AGENT:

MD 20850\$, US

LANGUAGE OF FILING: English LANGUAGE OF PUBL.: English DOCUMENT TYPE: Patent

PATENT INFORMATION:

NUMBER KIND DATE -----WO 2002011769 A1 20020214

DESIGNATED STATES

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR

CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ

TM TR TT TZ UA UG US UZ VN YU ZA ZW

RW (ARIPO): GH GM KE LS MW MZ SD SL SZ TZ UG ZW RW (EAPO):

AM AZ BY KG KZ MD RU TJ TM

RW (EPO): AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

TR

RW (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

APPLICATION INFO.: WO 2001-US24658 A 20010803 PRIORITY INFO.: US 2000-60/223,276 20000804

Disclosed are human VEGF-2 polypeptides, biologically active, ABEN

diagnostically

or therapeutically useful fragments, analogs, or derivatives thereof,

DNA (RNA) encoding such VEGF-2 polypeptides. Also provided are procedures for

producing such polypeptides by recombinant techniques and antibodies and antagonists

against such polypeptides. Such polypeptides and polynucleotides may be used

therapeutically for stimulating wound healing and for vascular tissue repair.

Also provided are methods of using the antibodies and antagonists to inhibit

tumor angiogenesis and thus tumor growth, inflammation, diabetic retinopathy,

rheumatoid arthritis, and psoriasis.

Cette invention a trait a des polypeptides du VEGF-2, a des fragments, ABFR des analogues ou des derives de ceux-ci, biologiquement actifs et des plus utiles en matiere de diagnostic ou de therapie, ainsi qu'a de l'ADN (ARN) codant ces polypeptides du VEGF-2. L'invention porte egalement sur des procedes de production de ces polypeptides, utilisant des techniques de recombinaison, ainsi que sur des anticorps

antagonistes de ceux-ci. Ces polypeptides et polynucleotides peuvent avoir une utilisation therapeutique, en l'occurrence pour stimuler la cicatrisation d'une blessure ainsi que pour reparer un tissu vasculaire.

Cette invention concerne, de surcroit, l'utilisation qui est faite des anticorps et des antagonistes susmentionnes pour inhiber une

tumorale et, partant, une croissance tumorale, ainsi que pour traiter l'inflammation,

la retinopathie diabetique, la polyarthrite rhumatoide et le psoriasis.

L23 ANSWER 15 OF 15 PCTFULL COPYRIGHT 2004 Univentio on STN

ACCESSION NUMBER: 1999046364 PCTFULL ED 20020515

TITLE (ENGLISH): VASCULAR ENDOTHELIAL GROWTH FACTOR 2

TITLE (FRENCH): FACTEUR DE CROISSANCE ENDOTHELIAL VASCULAIRE 2

INVENTOR (S): ROSEN, Craig, A.; CAO, Liang;

HU, Jing-Shan

PATENT ASSIGNEE(S): HUMAN GENOME SCIENCES, INC.;

ROSEN, Craig, A.;

CAO, Liang; HU, Jing-Shan

LANGUAGE OF PUBL.:

English DOCUMENT TYPE: Patent

PATENT INFORMATION:

NUMBER KIND DATE -----WO 9946364 A1 19990916

DESIGNATED STATES

W:

AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW GH GM KE LS MW SD SL SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT

SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

APPLICATION INFO.: WO 1999-US5021 A 19990310 PRIORITY INFO.: US 1998-09/042,105 19980313

US 1998-09/107,997 19980630

Disclosed are human VEGF-2 polypeptides, biologically active, ABEN diagnostically or therapeutically

useful fragments, analogs, or derivatives thereof, and DNA(RNA) encoding such VEGF-2 polypeptides.

Also provided are procedures for producing such polypeptides by recombinant techniques and

ABFR

antibodies and antagonists against such polypeptides. Such polypeptides and polynucleotides may be used therapeutically for stimulating wound healing and for vascular tissue repair. Also provided are methods of using the antibodies and antagonists to inhibit tumor angiogenesis and thus tumor growth, inflammation, diabetic retinopathy, rheumatoid arthritis, and psoriasis. L'invention concerne des polypeptides humains du facteur de croissance endothelial vasculaire 2, des fragments, analogues ou derives de ces polypeptides, actifs sur le plan biologique et utiles sur les plans diagnostique et therapeutique, ainsi que l'ADN (ARN) codant ces polypeptides. L'invention concerne egalement des procedes de production de tels polypeptides a l'aide de techniques de recombinaison, de meme que des anticorps et antagonistes diriges contre de tels polypeptides. On peut utiliser ces polypeptides et polynucleotides de maniere therapeutique pour stimuler la cicatrisation de plaies et dans la reparation de tissus vasculaires. L'invention concerne encore des procedes d'utilisation de ces anticorps et antagonistes, destines a inhiber l'angiogenese de tumeurs et donc la croissance de celles-ci, l'inflammation, la retinopathie diabetique, la polyarthrite rhumatoide et le psoriasis.

=> d his

(FILE 'HOME' ENTERED AT 18:18:15 ON 05 MAY 2004)

FILE 'MEDLINE, CAPLUS, SCISEARCH, BIOSIS, USPATFULL, PCTFULL' ENTERED AT 18:18:32 ON 05 MAY 2004 L151817 S VEGF 1786 S (PRODUCTION OR PRODUCE OR FORM OR FORMATION OR GROWTH) (S) LYMP L2L35 S LYMPHOSCINTIGRAPHY(S)ASSAY L45 DUP REM L3 (0 DUPLICATES REMOVED) L_5 261 S RABBIT(S) EAR(S) ASSAY 17689 S LYMPHEDEMA OR LYMPHANGIETASIA OR LYMPHANGIOMA OR LYMPHANGIOSA L6 L785 S L1(P)L2(P)L6 L8 9 S L1(S)L5 L9 7 DUP REM L8 (2 DUPLICATES REMOVED) 7115 S (ADMINISTER? OR ADMINISTRAT? OR GIVE OR DOSE)(S)L1 L10 113 S L10(P)L2 L11 L1240 S L10(P)L2(P)L6 2 S L12 AND (L5 OR L3) L13 L142 DUP REM L13 (0 DUPLICATES REMOVED) L15 394 S L1(S)L2 116 S L1(S)L6 L16 L17 42 S L10 AND L16 AND L15 L18 41 DUP REM L17 (1 DUPLICATE REMOVED) L19 1200 S VEGF(W)2